

What is claimed is:

1. An endotracheal tube and an intubation assist device for placing an endotracheal tube of predetermined length within a patient's trachea, said endotracheal tube having proximal and distal ends, said assist device including;

a substantially cylindrical handle having a central longitudinal axis, a proximate end and a distal end and having a centrally located single passageway extending longitudinally therethrough from one end to the other end along said axis;

a tubular insertion section, malleable along its entire length, having an open distal end and a proximate end received in said centrally located single passageway and extending through said cylindrical handle so that said centrally located single passageway and distal end of said tubular insertion section are in axial alignment, said distal end of said insertion section being positionable within the distal end of the endotracheal tube so that the entire length of said tubular insertion section is positionable within the endotracheal tube, and shapeable along its entire length to a substantially fixed configuration, prior to attachment of the endotracheal tube, for insertion into a patient without further manipulation;

attachment means at said distal end of said substantially cylindrical handle for removably attaching the endotracheal tube to said substantially cylindrical handle in air-tight relationship, with said insertion section removably positionable through the endotracheal tube but within the distal end thereof so that the endotracheal tube is formable to said predetermined substantially fixed configuration of said malleable insertion section and is in fixed relation thereto during insertion;

oxygen supply means extending through said substantially cylindrical handle for providing oxygen to the endotracheal tube during the intubation process; and

an endoscope assembly having a viewing end located at the open distal end of said insertion section, locatable within the distal end of the endotracheal tube when it is connected to said attachment means, and including an optic lens, a light carrying bundle of optical fibers, processing means including a light source and a video camera for processing an image from the optic lens, an external viewing monitor for displaying a visual image from the viewing end, and an optic cable assembly placed through said insertion section to connect the light carrying bundle of optic fibers, optic lens and processing means; so that said insertion section and the endotracheal tube may be placed into the patient's trachea and said substantially cylindrical handle may be manipulated to insert the endotracheal tube within the trachea using a visual image within said distal end of said endotracheal tube as a guide.

2. The assist device as claimed in claim 1 and wherein:

said handle has an axial counterbore at said distal end thereof, said oxygen supply means extending into said counterbore; and

said attachment means comprises a tube fitting having a distal end removably attachable to the endotracheal tube and a proximate end press fitted in air-tight relationship into said counterbore in said handle.

3. An endotracheal tube and an intubation assist device for placing a flexible endotracheal tube having an open distal end and a proximate end, within a patient's trachea, said assist device comprising:

a generally cylindrical shaped handle formed with an outside diameter and a central longitudinal axis, said handle having a single central passageway therethrough which lies along said axis and having an axial counterbore at a distal end for receiving the proximate end of the endotracheal tube for attaching the endotracheal tube to the handle in fixed air-tight position during insertion;

an elongated insertion section or predetermined length having distal and proximate ends, formed along its entire length of a malleable tubing sized to be placed through the endotracheal tube and press fitted into the single central passageway of said handle so that the single central passageway and the elongated insertion section are in axial alignment, said distal end of said insertion section being positionable within the distal end of the endotracheal tube so that the entire length of the elongated insertion section is positionable within the endotracheal tube;

oxygen supply means extending through the side of said handle into said counterbore endotracheal tube during the intubation process; and

an endoscope assembly having an objective optic lens and a light carrying bundle of optical fibers mounted at the open distal end of said insertion section, an optic cable assembly attached to the light carrying bundle of optical fibers and the optic lens, processing means attached to the optic cable assembly and including a light source connected to the light carrying bundle of optical fibers and a video camera for processing an image from the objective optic lens, and a TV monitor connected to the processing means for displaying a visual image so that said insertion section may be shaped by hand long its entire length to a predetermined substantially fixed configuration prior to attachment of said endotracheal tube for placement of the insertion section and conforming endotracheal tube within the patient's trachea using the visual image on the TV monitor of the end of the endotracheal tube as an aid for an operator in manipulating the handle to guide the endotracheal tube through the trachea.

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